

MEMORANDUM

DATE:

November 1, 2007

TO:

Distribution

FROM:

Afsaneh Ahmadi, Chief Building Official Official Official

SUBJECT:

2007 Fire-Damaged Slabs/Foundations

The following procedures will be in effect immediately regarding the existing slabs/foundations and the in-slab/under slab utilities damaged by the 2007 fires.

Since it is extremely difficult and not very practical to fully evaluate the integrity of the existing fire-damaged slabs/foundations and the in-slab/under slab utilities subjected to intense heat for unknown durations, and confirm their suitability to support a new rebuilt structure for its anticipated life, the existing fire-damaged slabs/foundations and the in-slab/under slab utilities shall be removed prior to rebuilding.

As an alternate, Development Services Department will review damage assessment reports, proposals for testing, and the associated test reports to confirm the suitability of the subject elements to support a new rebuilt structure under the following conditions:

- Damage assessment reports, proposals for testing, and test reports shall be site specific and prepared by licensed Civil or Structural engineers for slabs/foundations, and licensed Mechanical/Plumbing contractors in close coordination with material specialists for the utilities.
- Damage assessment reports shall adequately address the effects of intense heat on the slab/foundation concrete, reinforcing steel, the in-slab/under slab utilities, and the under slab moisture barrier.
- Any proposal to salvage the existing fire-damaged slab shall include an approved alternate method for providing moisture protection. It is assumed that the existing under slab moisture barrier, subjected to intense heat is no longer effective in providing moisture protection.
- Proposals for testing shall include a complete testing program and provide detailed information about test procedures, equipments, instruments, etc. It shall provide detailed acceptance/failure criteria and address the consequences of failure upon initial testing. Retesting of the failed components will not be granted. Repair procedures for destructive testing shall be provided. Testing agencies/firms shall be identified in the proposals for testing.

- Damage assessment reports, proposals for testing, and test reports shall be submitted to the building official for review and approval in a timely fashion.
- Concrete core and reinforcing steel samples shall be taken at the most distressed locations.

 Number and locations of the samples shall be reviewed and approved by the building official.
- No testing shall commence prior to the review of the damage assessment reports and approval of the proposal for testing by the building official.
- A written notification shall be submitted to the Field Inspection Services a minimum of three working days prior to the commencement of any testing or taking of the test samples.
- Taking of concrete core and reinforcing steel samples and all subsequent testing shall be performed by testing agencies approved by the City of San Diego. Contact the Field Inspection Services for the information on the approved testing agencies.
- Any proposal for the in-slab/under slab utility components to be salvaged shall accompany a letter
 of certification for the competency of the component to be salvaged by an expert material
 specialist such as a metallurgist for metal components and a polymer expert for plastic
 components.
- A letter of certification, signed by the licensed professional in charge of the proposal for testing shall be submitted to the building official stating that the fire-damaged components to be salvaged will perform in the same manner as if the salvaged elements were replaced in kind with new components throughout the expected life of the rebuilt building.
- All new foundations shall comply with the current building code.
- All existing foundations qualified to remain by testing, shall be replaced or upgraded to comply with the current building code if subjected to higher vertical and/or lateral load demands as a result of building re-configurations.
- All fire-damaged foundation hardware shall be replaced. Testing of existing fire-damaged
 hardware will not be granted. Foundation hardware is considered fire-damaged when the
 connected wood element(s) are charred, burnt, or removed. Due to the uncertainties associated
 with the strength of concrete at the location of individual hardware elements, Special Inspection
 shall be provided for the installation of all new foundation hardware in existing concrete slabs.
- All cracked foundations and those with significant building settlement shall be replaced. Testing and repairs of distressed foundations existing prior to the fire damage will not be granted.

All proposals for testing will be subjected to a critical and in-depth review to ensure that the new structures will not be built over existing uncertain slabs/foundations utilizing existing in-slab/under slab utilities that may not be suitable for a new building structure.

These procedures may be revised in part or whole without prior notice. Please contact Boniface Simbwa, Structural Engineering Associate at (619) 446-5062 with questions concerning this matter.